## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 13 October 2005 (13.10.2005)

## (10) International Publication Number WO 2005/094353 A3

(51) International Patent Classification: C12N 5/08 (2006.01)

(21) International Application Number:

PCT/US2005/010597

(22) International Filing Date: 29 March 2005 (29.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/557.669 29 March 2004 (29.03.2004)

(71) Applicant (for all designated States except US): CY-TOMATRIX, LLC [US/US]; 212 West Cummings Park, Woburn, MA 01801 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PYKETT, Mark, J. [US/US]; 223 A Main Street, Boxford, MA 01921 (US). ROSENZWEIG, Michael [US/ZA]; 20 Fayette Street, #2, Boston, MA 02116 (US).

(74) Agent: TREVISAN, Maria, A.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  $KG,\,KP,\,KR,\,KZ,\,LC,\,LK,\,LR,\,LS,\,LT,\,LU,\,LV,\,MA,\,MD,$ MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report: 8 September 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



(54) Title: METHODS FOR PRODUCTION OF REGULATORY T CELLS AND USES THEREOF

(57) Abstract: The invention provides culture systems for the generation, expansion and isolation of regulatory T cells. These culture systems can be used to screen for factors that modulate regulatory T cell development. Regulatory T cells derived from such cultures can be used in various in vitro and in vivo applications, as can culture populations depleted of such cells.